



# UNITED STATES PATENT AND TRADEMARK OFFICE

11A  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,588	09/25/2003	Viktor Soitu	VOI0200.CON	7482
7590 Todd T. Taylor Taylor & Aust, P.C. 142 S. Main St. P.O. Box 560 Avilla, IN 46710			EXAMINER ADDISON, KAREN B	
			ART UNIT	PAPER NUMBER
			2834	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/670,588

Applicant(s)

SOITU, VIKTOR

Examiner

Karen B. Addison

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivanto (4771197) in view of Yoshino(JP354122805A)

Ivanto discloses a electric machine in fig.1I comprising: a stator (3), a non- rotary shaft (4) caring the stator (3), a plurality of bearings (5) connected to the rotary shaft, a rotor (2) rotatably position around the stator and carried by the bearing and a micro-actuator (1) having a functional part with the short circuit arrangement associated with the rotor for operating the actuator. Ivanto also disclose short circuit arrangement as the rotor, the actuator as the conveyor drive roll (1) and a frequency transformer driving and active speed control (fig2). Ivanto do not disclose the rotor (hollow short circuiting arrangement) having a plurality of short circuiting bars and rings being integral with the rotor and the stator including windings one of the three pole stator winding, four pole winding and a six pole stator winding.

Yoshino discloses a squirrel cage motor fig.s1-5 comprising: a rotor integrally formed (15) having hollow short circuiting conductors (17) and hollow shaft(8) configured to flow fluid for the purpose of cooling efficiency. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

Art Unit: 2834

cage-shape motor of Ivanto with the hollow short- circuiting conductor of Yoshino to efficiently cool the motor.

3. Claims 21 –22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivanto in view of Yoshino as applied to claim 17-20 above, and further in view of Leibovich(4761602). Ivanto discloses a electric machine as seen above and Yoshino discloses a rotor integrally formed having a short circuiting conductors and a hollow shaft. However, neither Ivanto nor Yoshino discloses a rotor having copper short circuit conductors and the stator winding.

Leibovich disclose in fig. 1-14 a rotor (20) , a hollow short circuiting arrangement) having a plurality of solid short-circuiting bars (21a and 21b which are welded to the rotor) and rings (22,23) made of copper being integral with the rotor and a stator (30) including windings (36 and 38). Wherein, the windings includes one of a of a three pole stator winding, four pole windings and a six pole stator winding (col.6 line 40) for the purpose of transferring electromagnetic energy to the rotor winding. The method is inherent base on the structural limitation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electric machine of Ivanto and Yoshino with the stator structure of Leibovich for the purpose of providing variable speed with adjustable torque through phase shift control. It also would have been obvious to one having ordinary skill in the art at the invention was made select winding that will facilitate a power output approximately 0.5 kilowatts to 500.0 kilowatt and the rotational speed at 0 rpm to 20,000 rpm since it has been held that were the general conditions of a claim are disclosed in the prior art, discovering

optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ33.

Referring to claims 1 and 21, no patentable weight has been given to the method of manufacturing limitations (i. e. welded and casting) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

#### ***Response to Arguments***

4. Applicant's arguments with respect to claim 17-23 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

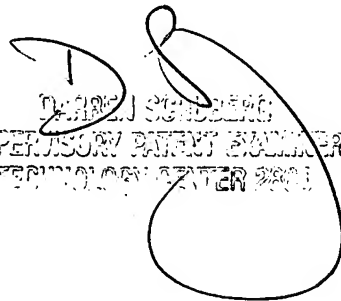
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B. Addison whose telephone number is 571-272-2017. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KBA  
3/29/07

  
DAVID J. SCHUBERT  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2801